# SEC. 503. AUTHORITY TO VARY NUMBER OF SPACE FORCE OFFICERS CONSIDERED FOR PROMOTION TO MAJOR GENERAL.

- (a) IN GENERAL.—Notwithstanding section 616(d) of title 10, United States Code, the number of officers recommended for promotion by a selection board convened by the Secretary of the Air Force under section 611(a) of title 10, United States Code, to consider officers on the Space Force active duty list for promotion to major general may not exceed the number equal to 95 percent of the total number of brigadier generals eligible for consideration by the board.
- (b) TERMINATION.—The authority provided under subsection (a) shall terminate on December 31, 2022.

SA 4715. Mr. ROUNDS (for Mr. INHOFE) submitted an amendment intended to be proposed to amendment SA 3867 submitted by Mr. REED and intended to be proposed to the bill H.R. 4350, to authorize appropriations for fiscal year 2022 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle G of title X, add the following:

#### SEC. 1064. EXPANSION OF PROPERTY OF DEPART-MENT OF DEFENSE NOT ELIGIBLE FOR SALE OR DONATION FOR LAW ENFORCEMENT ACTIVITIES AND STUDY ON USE OF SUCH AUTHORITY TO SELL OR DONATE PROPERTY.

- (a) IN GENERAL.—Section 2576a(e) of title 10, United States Code, is amended by adding at the end the following new paragraphs:
  - "(5) Explosives.
- "(6) Firearms of 50 cal mil or greater and ammunition of 50 cal mil or greater.
- "(7) Asphyxiating gases, including those comprised of lachrymatory agents, and analogous liquids, materials, or devices.".
  - (b) STUDY.-
- (1) IN GENERAL.—The Director of the Defense Logistics Agency shall conduct a study on the use by the Department of Defense of the authority under section 2576a of title 10, United States Code, and the administration of such authority by the Law Enforcement Support Office of the Department.
- (2) ELEMENTS.—The study required under paragraph (1) shall include—
- (A) an analysis of the degree to which personal property transferred under section 2576a of title 10, United States Code, has been distributed equitably between larger, well-resourced municipalities and units of government and smaller, less well-resourced municipalities and units of government; and
- (B) an identification of potential modifications to the authority under such section to ensure that property transferred under such section is transferred in a manner that provides adequate opportunity for participation by smaller, less well-resourced municipalities and units of government.
- (3) REPORT.—Not later than December 1, 2022, the Director of the Defense Logistics Agency shall submit to the congressional defense committees a report on the results of the study conducted under paragraph (1).

SA 4716. Mr. HAGERTY (for himself and Mrs. BLACKBURN) submitted an amendment intended to be proposed to amendment SA 3867 submitted by Mr. REED and intended to be proposed to the bill H.R. 4350, to authorize appro-

priations for fiscal year 2022 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:

At the end of subtitle E of title III, add the following:

#### SEC. 376. ACCESS TO CATEGORY 3 SUBTERRA-NEAN TRAINING FACILITIES.

- (a) IN GENERAL.—The Secretary of Defense may have access to a covered category 3 subterranean training facility on a continuing basis, subject to the availability of appropriations for such purpose.
- (b) AUTHORITY TO ENTER INTO LEASE.—The Secretary may enter into a short-term lease with a provider of a covered category 3 subterranean training facility for purposes of subsection (a).
- (c) COVERED CATEGORY 3 SUBTERRANEAN TRAINING FACILITY DEFINED.—In this section, the term "covered category 3 subterranean training facility" means a category 3 subterranean training facility that is—
- (1) operational as of the date of the enactment of this Act; and
- (2) determined by the Secretary to be safe for use as of such date.

SA 4717. Mr. BROWN submitted an amendment intended to be proposed to amendment SA 3867 submitted by Mr. REED and intended to be proposed to the bill H.R. 4350, to authorize appropriations for fiscal year 2022 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

## TITLE \_\_\_\_STEM RESEARCH GAINS

This title may be cited as the "Strengthening the STEM Research Workforce to Generate American Infrastructure for National Security Act of 2021" or the "STEM Research GAINS Act of 2021".

#### SEC. 02. DEFINITIONS.

- In this title:
- (1) COVERED FIELD.—The term "covered field" means a field in science, technology, engineering, or mathematics research or development that is determined to be—
- (A) a subject area relating to the national security of the United States;
- (B) a subject area relating to the United States' ability to compete in an open, fair, and competitive international market and achieve economic growth; or
- (C) a subject area that is in need of expanded and strengthened academic pipelines to ensure a diverse workforce.
- (2) DIRECTOR.—The term "Director" means the Director of the National Science Foundation.
- (3) FEDERAL SCIENCE AGENCY.—The term "Federal science agency" has the meaning given the term in section 103(f) of the America COMPETES Reauthorization Act of 2010 (42 U.S.C. 6623(f)).
- (4) Institution of Higher Education.—The term "institution of higher education" means an institution of higher education described in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001).
- (5) MINORITY.—The term "minority" has the meaning given the term in section 365(2)

of the Higher Education Act of 1965 (20 U.S.C. 1067k(2)).

- (6) MINORITY-SERVING INSTITUTION.—The term "minority-serving institution" means—
- (A) a part B institution (as defined in section 322 of the Higher Education Act of 1965 (20 U.S.C. 1061));
- (B) a Hispanic-serving institution (as defined in section 502 of that Act (20 U.S.C. 1101a));
- (C) a Tribal College or University (as defined in section 316 of that Act (20 U.S.C. 1059c));
- (D) an Alaska Native-serving institution (as defined in section 317(b) of that Act (20 U.S.C. 1059d(b)));
- (E) a Native Hawaiian-serving institution (as defined in section 317(b) of that Act (20 U.S.C. 1059d(b))):
- (F) a Predominantly Black Institution (as defined in section 318 of that Act (20 U.S.C. 1059e)):
- (G) an Asian American and Native American Pacific Islander-serving institution (as defined in section 320(b) of that Act (20 U.S.C. 1059g(b))); or
- (H) a Native American-serving, nontribal institution (as defined in section 319 of that Act (20 U.S.C. 1059f)).
- (7) STEM.—The term "STEM" means science, technology, engineering, and mathematics, including computer science.
- (8) UNDERREPRESENTED FIELD.—The term "underrepresented field" means a field in STEM in which the national rate of representation of women among tenured, tenure-track faculty, or nonfaculty researchers at doctorate-granting institutions of higher education is less than 25 percent, according to the most recent data available from the National Center for Science and Engineering Statistics.
- (9) UNDERREPRESENTED IN SCIENCE AND ENGINEERING.—The term "underrepresented in science and engineering" means a minority group whose number of scientists and engineers, per 10,000 population of that group, is substantially below the comparable figure for scientists and engineers who are white and not of Hispanic origin, as determined by the Secretary of Education under section 637.4(b) of title 34, Code of Federal Regulations or similar successor regulations

# Subtitle A—Expanding Pipeline Programs to Research Opportunities

# SEC. \_\_\_11. RESEARCH AND DEVELOPMENT AREAS CRITICAL TO NATIONAL SECURITY.

- (a) COVERED FIELDS.—The President shall conduct a study to identify areas for research and development that are covered fields.
- (b) UPDATE.—Not less than once every 5 years, the President shall reassess the covered fields.

#### SEC. \_\_\_12. INCREASING INVESTMENT IN UNDER-GRADUATE SCIENCE PIPELINES.

- (a) IN GENERAL.—There are authorized to be appropriated to the National Science Foundation for fiscal year 2022 and for each of the following 4 years, \$750,000,000, which shall be used by the Director for the following National Science Foundation programs:
- (1) The Historically Black Colleges and Universities Undergraduate Program.
- (2) The Louis Stokes Alliances for Minority Participation program.
- (3) The Research Experiences for Undergraduates program.
- (4) The Tribal Colleges and Universities Program.
- (5) The Improving Undergraduates STEM Education: Hispanic-Serving Institutions Program.

- (6) Other programs to broaden participation in undergraduate STEM programs, as determined by the Director.
- (b) SUPPLEMENT NOT SUPPLANT.—The amounts used under subsection (a) shall supplement, and not supplant, any other amounts used by the National Science Foundation for the programs described in such subsection.

# SEC. \_\_\_14. BOLSTERING STEM PIPELINES STRATEGIC PLAN.

- (a) BROADENING PARTICIPATION STRATEGIC PLAN.—Not later than 1 year after the date of enactment of this Act, the Subcommittee on Federal Coordination in Science, Technology, Engineering, and Mathematics Education (FC-STEM) of the Committee on Technology, Engineering, Mathematics Education (CoSTEM) of the National Science and Technology Council shall submit to Congress a report containing the subcommittee's current strategic plan for Federal science agencies to increase the capacity of STEM programs carried out by Federal science agencies that are in effect as of the date of the report to increase the participation of individuals who are underrepresented in science and engineering, women who are underrepresented in STEM fields. and low-income and first-generation college students, in order to broaden participation in grants and programs carried out by the Federal science agencies. The report shall include-
- (1) a description of how the grants and programs that are carried out by the Federal science agencies, as of the time of the report, are carried out in a manner that advances diverse pipelines in STEM fields, and a description of how the Federal science agencies can better advance such diverse pipelines;
- (2) an analysis of the data collection that would allow for meaningful goal setting and transparency relating to the Federal science agencies' progress in broadening participation of individuals from groups that are underrepresented in science and engineering with respect to those grants and programs;
- (3) an analysis of how the Federal science agencies can meet goals related to broadening the participation of individuals from groups that are underrepresented in science and engineering by—
- (A) creating or expanding funding opportunities;
- (B) modifying existing research and development programs; and
- (C) establishing coordination between existing programs carried out by the Federal science agencies:
- (4) a description of the ways that the Federal science agencies work with minority-serving institutions to—
- (A) enable those eligible institutions to compete effectively for grants, contracts, or cooperative agreements carried out by the National Science Foundation:
- (B) encourage those eligible institutions to participate in programs carried out by the Federal science agencies; and
- (C) encourage students and faculty, particularly minority students and faculty and students and faculty in underrepresented fields, at the eligible institution to apply for and successfully earn graduate and professional opportunities from programs supported by the Federal science agencies;
- (5) an analysis of the best ways to share best practices for institutions of higher education and Federal science agencies interested in supporting individuals from groups that are underrepresented in science and engineering;
- (6) an analysis of how the Federal science agencies can work together to advance goals related to broadening the participation of individuals from groups that are underrepresented in science and engineering; and

- (7) an analysis of how to promote relationships between institutions of higher education and high schools to enhance the pipeline for high school students to undergraduate STEM opportunities in covered fields and enhance the quality of high school teachers in STEM fields.
- (b) REPORT TO CONGRESS.—Not later than 2 years after the date of enactment of this Act, and every 5 years thereafter, the Subcommittee on Federal Coordination in Science, Technology, Engineering, and Mathematics Education of the Committee on Science, Technology, Engineering, and Mathematics Education of the National Science and Technology Council shall report to Congress on the implementation by Federal science agencies of the strategic plan developed under this section.

#### SEC. \_\_\_15. RESEARCH PROGRAM CLEARING-HOUSE AND TECHNICAL ASSIST-ANCE CENTER.

- (a) OPPORTUNITIES CLEARINGHOUSE.—The Subcommittee on Federal Coordination in Science. Technology, Engineering, Mathematics Education of the Committee on Science, Technology, Engineering, and Mathematics Education of the National Science and Technology Council shall establish and maintain a public clearinghouse (including by maintaining a publicly available website) of all research programs sponsored by Federal science agencies that are available to individuals as undergraduate and graduate students.
- (b) BEST PRACTICES CLEARINGHOUSE.—The Director shall work with the Director of the Institute of Education Sciences of the Department of Education to maintain the What Works Clearinghouse to collect, analyze, identify, disseminate, and make publicly available information about best practices for institutions of higher education to strengthen the pipeline of individuals pursuing careers in covered fields (particularly for minority students pursuing those careers), and particularly information to help address gaps identified in the publication entitled "Minority Serving Institutions: America's Underutilized Resource for Strengthening the STEM Workforce", published in 2019 by the National Academies of Sciences, Engineering, and Medicine.
- (c) TECHNICAL ASSISTANCE.—The Director shall fund the maintenance of existing (as of the date of the funding) technical resource centers to enable the centers to work with institutions of higher education seeking to implement strategies to—
- (1) bolster and diversify the student body at the institution that pursue STEM fields;
- (2) support students underrepresented in science and engineering who are pursuing research-based STEM studies to help those students continue and complete those studies; or
- (3) support other technical assistance activities determined by the Director to be appropriate.

#### Subtitle B—Increasing Transparency for Graduate Education

#### SEC. 21. STRENGTHENING TRANSPARENCY.

- (a) ASSESSMENTS.—The Director shall conduct regular assessments of graduate research fellowship programs carried out by the National Science Foundation and make additional information publicly available about those programs, including for each program—
- (1) the number of applications received, disaggregated by undergraduate and graduate institution, race, gender, age, and eligibility for a Federal Pell Grant:
- (2) the number of applications approved, disaggregated by undergraduate and graduate institution, race, gender, age, and eligibility for a Federal Pell Grant;

- (3) the number of students that are awarded grants to develop a diverse STEM workforce, disaggregated by undergraduate population, public or private institution, and (in the case of a minority-serving institution) type of minority-serving institutions;
- (4) an analysis of the recipients of scholarships and fellowships awarded by institutions of higher education through the graduate research fellowship programs, disaggregated by race; and
- (5) the ratio of the number of individuals who participated in the assessment from the program to the number of students in the program.
- (b) VOLUNTARILY PROVIDED DATA.—For purposes of subsection (a), the Director shall base the assessments on, and make information publicly available on, data voluntarily provided by student applicants for the graduate research fellowship program involved.
- (c) REPORTS.—The Director shall prepare and submit to Congress, and make publicly available, annual reports that show trends in how research fellowships and scholarships supported by the National Science Foundation are awarded to individuals from underrepresented groups, institutions of higher education, and entities from different geographic areas, in order to better show trends in the participation of underrepresented groups in such research fellowships and scholarships.

#### Subtitle C—Strengthening the National Security Research Workforce

#### SEC. \_\_\_31. EARLY CAREER FACULTY SUPPORTS.

- (a) RISING FACULTY PROFESSIONAL AD-VANCEMENT PROGRAM.—
- (1) ESTABLISHMENT OF PILOT PROGRAM.—Not later than 1 year after the date of enactment of this Act, the Director shall select an organization to establish a 5-year pilot mentorship program to be known as "Rising Faculty Professional Advancement Program" (referred to in this section as the "program") in order to increase the diversity of faculty in STEM fields.
- (2) PURPOSE.—The purpose of the Rising Faculty Professional Advancement Program shall be—
- (A) to increase the number of doctorallevel professionals from underrepresented groups in STEM fields who transition into faculty positions at institutions of higher education; and
- (B) to improve mentorship and training for researchers who are navigating the transition in the research pipeline to becoming faculty, which is a time when a significant decrease in diversity often occurs.
  - (b) Program Participants.—
- (1) ELIGIBILITY.—An individual shall be eligible to participate in the program if the individual is a doctoral degree holding researcher in a post-doctoral research position or early-career faculty (defined as a faculty researcher with a title of assistant professor or other non-tenured equivalent).
- (2) OUTREACH.—The organization shall conduct outreach to encourage participation in the program by individuals described in paragraph (1) who are from groups underrepresented in STEM fields, including—
- (A) individuals from groups who are underrepresented in science and engineering;
- (B) individuals holding doctoral degrees in covered fields from or faculty positions at minority-serving institutions;
- (C) individuals holding doctoral degrees in covered fields from institutions of higher education in the bottom 90 percent of research and development expenditures, as ranked by the National Center for Science and Engineering Statistics; and
- (D) individuals who are women and who hold positions from underrepresented fields.
  - (c) ACTIVITIES.—

- (1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the organization shall establish program activities including—
- (A) training for Rising Faculty and mentors:
  - (B) a program curriculum; and
- (C) support for existing (as of the date of provision of the support) mentoring programs for mentor engagement.
- (2) COLLABORATIVE RESEARCH.—The organization shall encourage program mentors to network and enter into collaboration on research projects with Rising Faculty and other mentors within the program.
- (3) SURVEY.—Following the first year of program enrollment, and on an annual basis during the program, the organization shall—
- (A) conduct a survey of Rising Faculty and mentors to determine best practices and outcomes achieved;
- (B) conduct a survey to collect information about the demographics of the Rising Faculty and mentors; and
- (C) conduct additional surveys or other analyses of Rising Faculty who completed the program to assess career progression for not more than 5 years following the completion of the program by Rising Faculty.
- (d) ASSESSMENT OF THE PILOT PROGRAM AND RECOMMENDATIONS.—Not later than 180 days after the conclusion of the pilot program, the Director shall provide a report to the appropriate committees of Congress with respect to the pilot program, which shall include—
- (1) a description and evaluation of the status and effectiveness of the program, including a summary of survey data collected:
- (2) an assessment of the success and utility of the pilot program in meeting the purposes of this section;
- (3) a summary and analysis of the types and frequency of activities and policies developed and carried out under the pilot program; and
- (4) a recommendation about continuing the program on a pilot or permanent basis.
- SA 4718. Mr. BROWN (for himself and Mr. WARNER) submitted an amendment intended to be proposed to amendment SA 3867 submitted by Mr. REED and intended to be proposed to the bill H.R. 4350, to authorize appropriations for fiscal year 2022 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, personnel prescribe military strengths for such fiscal year, and for other purposes: which was ordered to lie on the table; as follows:
- At the appropriate place, insert the following:

## SEC. \_\_\_\_\_. MINORITY INSTITUTE FOR DEFENSE RESEARCH.

- (a) PLAN TO ESTABLISH MINORITY INSTITUTE FOR DEFENSE RESEARCH.—
- (1) IN GENERAL.—Not later than 1 year after the date of the enactment of this section, the Secretary shall submit to the congressional defense committees a plan (in this section referred to as the "Plan") for the establishment of the Minority Institute for Defense Research (in this section referred to as the "Consortium").
- (2) ELEMENTS.—The Plan shall include the following:
- (A) Information relating to the projected needs of the Department for the next twenty years with respect to essential engineering, research, or development capability.
- (B) An assessment relating to the engineering, research, and development capability of each minority institution to identify each leading minority institution.

- (C) Information relating to the advancements and investments necessary to elevate a minority institution or a consortium of minority institutions to the research capacity of a University Affiliated Research Center
- (D) Recommendations relating to actions that may be taken by the Department, Congress, and minority institutions to establish the Consortium within 10 years.
- (3) Publicly available.—The Plan shall be posted on a publicly available website of the Department.
- (b) NAMING OF THE CONSORTIUM.—With respect to the naming of the Consortium, the Secretary shall—
- (1) establish a process to solicit and review proposals of names from—
  - (A) minority institutions:
- (B) nonprofit institutions that advocate on behalf of minority institutions; and
- (C) members of the public:
- (2) develop a list of all names received pursuant to paragraph (1);
- (3) provide opportunity for public comment on the names included on such list; and
- (4) choose a name from such list to name the Consortium.
- (c) Grant Program for Leading Minority Institutions.—
- (1) IN GENERAL.—The Secretary may establish a program to award grants, on a competitive basis, to leading minority institutions for the purposes described in paragraph (2).
- (2) PURPOSES.—The purposes described in this paragraph are the following:
- (A) Establishing a legal entity for the purpose of entering into research contracts or agreements with the Federal Government or the Consortium.
- (B) Developing the capability to bid on Federal Government or Consortium contracts.
- (C) Requesting technical assistance from the Federal Government or a private entity with respect to contracting with the Federal Government or the Consortium.
- (D) Recruiting and retaining research faculty.
- (E) Advancing research capabilities relating to the national security of the United States.
- (F) Any other matter determined appropriate by the Secretary.
- (3) APPLICATION.—To be eligible to receive a grant under this section, a leading minority institution shall submit to the Secretary an application therefor in such form, and containing such information, as the Secretary may require.
- (4) PREFERENCE.—In awarding grants pursuant to paragraph (1), the Secretary shall give preference to a leading minority institution with a R1 or R2 status on the Carnegie Classification of Institutions of Higher Education.
- (d) DEFINITIONS.—In this section:
- (1) The term "Department" means the Department of Defense.
- (2) The term "leading minority institution" means a minority institution identified (pursuant to the assessment required under subsection (a)(2)(B)) as being in the top 20 percent of all such institutions with respect to providing essential engineering, research, or development capability.
- (3) The term "institution of higher education" has the meaning given such term in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001).
- (4) The term "minority institution" means—
- (A) a part B institution (as such term is defined in section 322 of the Higher Education Act of 1965 (20 U.S.C. 1061)); or
- (B) any institution of higher education at which not less than 50 percent of the total

- student enrollment consists of students from ethnic groups that are underrepresented in the fields of science and engineering.
- (5) The term "Secretary" means the Secretary of Defense.
- (6) The term "University Affiliated Research Center" means a research organization within an institution of higher education that—
- (A) provides or maintains Department essential engineering, research, or development capabilities; and
- (B) receives sole source contract funding from the Department pursuant to section 2304(c)(3)(B) of title 10, United States Code.

## SEC. \_\_\_\_\_. SUBCONTRACT REQUIREMENTS FOR MINORITY INSTITUTIONS.

(a) IN GENERAL.—Section 2304 of title 10, United States Code, is amended by adding at the end the following new subsection:

"(m)(1) The head of an agency shall require that a contract awarded to an educational institution pursuant to subsection (c)(3)(B) includes a requirement to subcontract with one or more minority institutions for a total amount of not less than 5 percent of the amount awarded in the contract.

- "(2) For the purposes of this subsection, a minority institution means—
- "(A) a part B institution (as that term is defined in section 322(2) of the Higher Education Act of 1965 (20 U.S.C. 1061(2))); or
- "(B) any other institution of higher education (as that term is defined in section 101 of such Act (20 U.S.C. 1001)) at which not less than 50 percent of the total student enrollment consists of students from ethnic groups that are underrepresented in the fields of science and engineering.".
- (b) EFFECTIVE DATE.—The amendments made by subsection (a) shall—
  - (1) take effect on October 1, 2026; and
- (2) apply with respect to funds that are awarded by the Department of Defense on or after such date.

#### SEC. \_\_\_\_\_. FUNDING FOR APPLIED AND AD-VANCED TECHNOLOGY DEVELOP-MENT AT HISTORICALLY BLACK COLLEGES AND UNIVERSITIES AND MINORITY INSTITUTIONS.

- (a) ADDITIONAL FUNDING.—
- (1) APPLIED RESEARCH.—(A) The amount authorized to be appropriated for fiscal year 2022 by section 201 for research, development, test, and evaluation is hereby increased by \$30,000,000, with the amount of the increase to be available for Advancement of S&T Priorities (PE 0602251D8Z).
- (B) The amount available under subparagraph (A) shall be available for minority institutions.
- (2) ADVANCED TECHNOLOGY DEVELOPMENT.—
  (A) The amount authorized to be appropriated for fiscal year 2022 by section 201 for research, development, test, and evaluation is hereby increased by \$15,000,000, with the amount of the increase to be available for Advanced Research High speed flight experiment testing (PE 0603180C).
- (B) The amount available under subparagraph (A) shall be available for minority institutions.
- (b) OFFSET.—The amount authorized to be appropriated for fiscal year 2022 by section 301 for operation and maintenance is hereby decreased by \$45,000,000, with the amount of the decrease to be taken from amounts available as specified in the funding table in section 4301 for the Afghanistan Security Forces Fund, Afghan Air Force Sustainment.
- (c) DEFINITION OF MINORITY INSTITUTION.—In this section, the term "minority institution" means—
- (1) a part B institution (as such term is defined in section 322 of the Higher Education Act of 1965 (20 U.S.C. 1061)); or
- (2) any institution of higher education at which not less than 50 percent of the total